October 18, 2001

Revised Public Health Guidelines For Responding to Suspicious Letters, Packages, and/or Substances

Many facilities and individuals in communities around the country have received anthrax threat letters. Over the weekend and this week, there have been numerous events and reports that I am aware of in southwest Virginia and the New River Valley. Most have been suspicious envelopes or packages with or without powdery materials; others have been suspicious powdery substances or materials found in a variety of public/private settings.

For this reason, I am sending you a set of revised public health guidelines for handling such incidents (approaches to the investigation of suspicious letters, packages, and/or substances) and advice for the general public on how to handle anthrax and other biological agent threats.

DO NOT PANIC

1. Anthrax organisms (the bacteria, *Bacillus anthracis*) can cause infection in the skin, gastrointestinal system, or the lungs. To do so, the organism must be rubbed into abraded skin, swallowed, or inhaled as a fine, aerosolized mist. Disease can be prevented after exposure to the anthrax spores by early treatment with the appropriate antibiotics. Anthrax is not spread from one person to another person.
2. For anthrax to be effective as a covert agent, it must be aerosolized into very small particles. This is difficult to do and requires a great deal of technical skill and special equipment. If these small particles are inhaled, life-threatening lung infection can occur, but prompt recognition and treatment are effective.

Responding to Suspicious Letters and Packages

Guidance for responding to suspicious letters and packages has been detailed in the official CDC Health Advisory, *How to Handle Anthrax and Other Biological Agent Threats*, that can be found at http://www.bt.cdc.gov/DocumentsApp/Anthrax/OfficialCDCHealthAdvisoryOct122001. The U.S. Postal Service has also provided guidance, *What To Do If You Receive An Anthrax Threat*, that may be found at http://www.ups.com/news2001/press/pr01_1010tips.htm. Refer to these advisories for details, although some key points are summarized below.

Some typical characteristics of suspicious letters or packages include:

- Excessive postage
- Powdery substance on the outside
- Handwritten or poorly typed addresses
- Incorrect titles
- Title, but no name
- Misspellings of common words
- Oily stains, discolorations, or strange odors
- No return address, or one that can't be verified as legitimate
- Excessive or unusual weight, given their size
- Lopsided or uneven envelope
- Protruding wires or aluminum foil
- Excessive security material (e.g., masking tape, string)
- Visual distractions
- Ticking sound
- Marked with restrictive endorsements (e.g., "Personal" or "Confidential")
- Postmark with city/state not matching return address
- Unexpected or from someone unfamiliar to you
- Addressed to someone no longer with your organization or are otherwise outdated

Dealing with a Suspicious Letter or Package or Material

1. Do not open any suspicious letter or package and do not touch any suspicious powder or material. Do not shake or empty the contents of any suspicious envelope or package.
2. If the letter or package has already been opened and powder or fluid or other material spills out, DO NOT try to clean up powders or fluids or other materials. Keep others away from the area.
3. HANDLE the specimens carefully, such as by using tweezers, in an effort to preserve the outer surface in case law enforcement officers will need to test for fingerprints.
4. PLACE the envelope or package or material in double plastic sealable bags or some other type of container to prevent leakage of contents, using plastic/latex/rubber gloves and a particulate (or TB) mask if possible.
5. If you do not have any container or plastic bags, gloves, or a mask, then COVER the envelope or package or material with anything (e.g., clothing, paper, trash can, etc.) and do not remove this cover.
6. LEAVE the room (or area) and CLOSE the door, or section off the area to prevent others from entering (i.e., keep others away).

7. WASH your hands with **soap and water** to prevent spreading any powder or other material to your face or skin.
8. What to do next
   - If you are at **HOME**, report the incident to local police. The local police may notify HAZMAT to evaluate and assess the incident. The local police or HAZMAT will examine the letter, package, or material(s) and determine if an environmental sample of the contents will be forwarded to the New River Health District for biological testing. If needed, environmental samples will be collected for biological testing and the area decontaminated (cleaned-up). **Note: Unopened envelopes or packages will NOT be sent for testing.** A risk assessment for those persons involved in the incident will be coordinated by law enforcement personnel and individuals referred to their primary care physicians as necessary. The local police will also notify the State Police and the FBI if terrorism is suspected.

   - If you are at **WORK**, report the incident to local police, and notify your building security official or an available supervisor. The local police or HAZMAT will examine the letter, package, or material(s) and determine if an environmental sample of the contents will be forwarded to the New River Health District for biological testing. If needed, environmental samples will be collected for biological testing and the area decontaminated (cleaned-up). **Note: Unopened envelopes or packages will NOT be sent for testing**. A risk assessment for those persons involved in the incident will be coordinated by law enforcement personnel and individuals referred to their primary care physicians as necessary. The local police will also notify the State Police and the FBI if terrorism is suspected.

9. If possible, **LIST** all people who were in the room or area when this suspicious letter or package was recognized. Give this list to both the local public health authorities and law enforcement officials for follow-up investigations and advice.
10. Remove any ***contaminated*** clothing and place in a plastic bag that can be sealed; give the bag to law enforcement personnel. Clothing that is not contaminated does not pose any significant risk, does not need to be discarded, and can be washed in the regular laundry.
11. Shower with soap and water as soon as possible. Do not use bleach or disinfectant on your skin.
12. State and local health department officials will be contacted by local law enforcement and/or **HAZMAT**about such incidents. For local health departments within the New River Health District, Katrina Watson, Nurse Epidemiologist, Dr. Jody Hershey, Director, or another public health professional can be reached at (540) 381-7100, ext. 156 between 8 a.m. and 4:30 p.m.

13. Biological testing on the collected environmental specimens will be done through the State Public Health Laboratory in Richmond, the Division of Consolidated Laboratory Services (DCLS). Depending on the situation and scenario, the environmental sample for biological testing will be delivered EITHER (a) by local law enforcement, via chain of custody, to the New River Health District office in Christiansburg for overnight courier service to DCLS, OR (b) in more emergent, priority situations, via State Police relay to DCLS. Preliminary biologic testing will be done on samples received by DCLS in a priority manner, but usually within approximately 2 days after the sample is received. Confirmatory biologic testing will be completed within approximately 4 days after DCLS receives the specimen.
14. If analysis of the specimen yields a positive test for anthrax, the need for prophylaxis and further treatment for those persons exposed (and possibly other persons in the immediate area) will be made by the local health department in consultation with the affected individual(s)' primary care physician(s).

For all settings and incidents, local law enforcement authorities are the primary contact and will determine the credibility of suspicious letters, packages, and other potential threats. After being notified of a particular situation, a law enforcement official (or public safety responder) will arrive at the scene. The responder may then contact the State Police and/or the FBI, which will evaluate information and make a determination regarding the credibility of the threat.

Evaluating and Managing An Exposed Environment

The response to evaluating and managing an exposed environment is highly contingent upon the specific situation:

- First, the nature of the threat needs to be determined. If a package is received intact and law enforcement considers it to be a creditable threat, then law enforcement will determine which portions of the building should be secured and how long access will be restricted.

- Law enforcement will make this determination since the area is considered a crime scene. Advice from public health officials may be sought in the decision process.

- For intact letters and packages, the restricted area is likely to be limited and the duration of the restriction may be commensurately limited.

- For letters and packages not intact, the restricted areas may be expanded to include those areas where the contents may have discharged into the environment.

- Other factors to be considered in determining the boundaries of the restricted area

include air handling systems, tracking of the contaminant by people moving through the area, and other transport means.

- The areas are restricted generally until laboratory analysis can be completed.

If environmental sampling results reveal that the presence of anthrax (*B. anthracis*) poses an ongoing threat, federal response plans may be activated to address the issue of cleanup of the contaminant.

- The Environmental Protection Agency has lead responsibility for environmental issues with the assistance of 16 federal agencies and departments, including CDC.

- Federal agencies, in conjunction with State and local agencies, will determine the most efficient approach to the cleanup based upon factors including sampling results, review of cleanup options, and the environmental situation.

Assessment of Individual Risk of Exposure

Much as we do with rabies and other diseases, it is important to **assess the nature of possible exposure to anthrax of any concerned person before deciding on a course of action**. Factors that need to be assessed include credibility of the exposure and whether the exposure might result in inhalational anthrax or cutaneous anthrax.

Credibility

The potential that an exposure really is anthrax is higher when:

- There is a distinct threatening message with the powder or substance
- The substance is brown or sandy-brown rather than stark white. Of note, the positive NBC letter is reported to have had brownish sand-like material in it.
- If a suspicious letter or package is involved (see *Responding to Suspicious Letters and Packages* guidance above).

Situations with lower credibility that the exposure is anthrax include scenes in which a **white** powder is found without a note, where one might expect someone to have spilled sugar, flour, talcum powder, etc.; or a situation in which a white powder comes in an envelope with expected mail that is easy to trace to the sending source.

Route of Potential Exposure

The response to evaluating and managing an exposed environment is highly contingent upon the specific situation:

- ***Inhalational anthrax*** generally requires a large dose of fine powder particles 1-5 microns in size, a size necessary to get into the alveoli of the lungs. It is technologically very difficult to disperse anthrax into a form where it can be inhaled. If particles get on clothing and on surfaces, the chance that they may be aerosolized into particles of this size is nearly impossible. Thus, **visible settled powders and letters or boxes that are opened and contain powders are usually not serious threats for *inhalational anthrax***. Thus, the immediate risk to people "exposed" in these situations is small.

  Inhalational anthrax would be of concern if: a) a person got a face full of fine powder with heavy contamination of eyes, nose and throat; or b) there was a real concern of aerosolization based on warning that an air handling system is contaminated or warning that a biological agent was released in a public space. **Prophylactic antibiotics should be limited to persons with these types of exposures, while awaiting testing of the powder and/or environmental samples.**
- ***Cutaneous anthrax*** appears to require lower doses and is the most plausible form of anthrax that could be caused by letters and packages that did not have obvious aerosolizing devices. This form of the disease results when spores are rubbed into the skin or cuts in the skin. Immediate washing of exposed skin with soap and water can prevent infection. Given its characteristic physical picture and very good prognosis when recognized and treated, potential exposures can readily be managed by observation and treatment as clinically needed. **Prophylaxis is <u>not</u> recommended for cutaneous anthrax**

Risk-based Medical Management of Possible Exposures

Prophylactic antibiotics should be limited to persons with a known exposure to a credible threat. Clinicians seeing patients who say they may have been exposed to anthrax should assess the individual risk of exposure.

<u>Low-credibility exposure situations and situations with possible exposure</u>

- If no clear-cut exposure (e.g., a patient now has cold symptoms and is worried because he works in D.C./handles mail/may have received an unusual letter), the individual should be reassured about the rarity of infection without known exposures. It is ***not*** recommended that a nasal swab or blood is collected for a serologic test to try to confirm that there is no evidence of exposure to anthrax. It is also *not* recommended that antibiotics be prescribed for prophylactic treatment for anthrax.

- Please note that asymptomatic individuals who received a letter two weeks ago or longer that they are now worried about should be reassured that they are past the usual incubation period for the disease. For those who have respiratory symptoms, if they have had them for more than two days and have not gotten much worse, they should be assured that their illness is not consistent with the picture of anthrax.
- If the only potential exposure to a powder/suspicious substance is cutaneous (the usual situation with finding powder on a surface, opening a letter with powder in it), it should be noted that cutaneous anthrax can be readily diagnosed and easily treated by their primary care physician. In this case, it is ***not*** recommended that a nasal swab or blood for serology is collected in the absence of a skin lesion or that antibiotics are prescribed prophylactically. This situation is analogous to the rabies situation of having a provoked bite from an animal that is highly unlikely to have rabies e.g., bitten by a squirrel while trying to feed it. Individuals with this type of exposure should be referred to and followed by their primary care physician, and if symptoms develop, their primary care physician can order the necessary laboratory testing and presumptive treatment.

High-credibility exposure situations

- If the exposure situation suggests real potential for inhalational exposure (e.g., got a face and nose full of powder from highly suspicious situation), the individual should be referred to and followed by their primary care physician who may consider starting preventive therapy until exposure is ruled out. (This situation is analogous to starting rabies prevention prior to getting a test result back if there is a severe animal bite to the face from a plausible source of exposure and testing may be delayed).
- If situation suggests real potential for cutaneous exposure (e.g., hand contact with brownish powder or letter in envelope with threatening note), the individual should be referred to and followed up by their primary care physician who will provide reassurance and counseling about the signs and symptoms of cutaneous anthrax and wait to start preventive treatment until the culture of powder is complete. This is analogous to waiting to start rabies treatment pending testing for plausible rabies exposure e.g., unprovoked stray cat bite on hand when you have time to sort the situation out.

Nasal Swabs

- The Centers for Disease Control and Prevention (CDC) does not recommend the use of nasal swab testing on a routine basis to determine whether a person has been exposed to *B. anthracis* or as a diagnostic tool. Their sensitivity and specificity and clinical value are all unknown.

- The use of nasal swabs in recent investigations by CDC has been for epidemiologic purposes only, that is, to try to find out who was at highest risk of exposure in situations in the setting of a confirmed case.

General

No other testing for anthrax of individuals with respiratory symptoms is recommended at this time, i.e., other than those with a known exposure.